

Contents Volume 27

Special Issue: Multi-Agent Systems Applications

Guest Editors: L.M. Camarinha-Matos, H. Afsarmanesh, V. Mařík

L.M. Camarinha-Matos, H. Afsarmanesh and V. Mařík
Multi-agent systems applications (Editorial)

1

K. Fischer
Agent-based design of holonic manufacturing systems

3

R.J. Rabelo, L.M. Camarinha-Matos and H. Afsarmanesh
Multi-agent-based agile scheduling

15

V. Mařík, M. Pěchouček, J. Lažanský and C. Roche
PVS'98 agents: structures, models and production planning application

29

T. Papaioannou and J. Edwards
Using mobile agents to improve the alignment between manufacturing and
its IT support systems

45

L.M. Camarinha-Matos and W. Vieira
Intelligent mobile agents in elderly care

59

L.B. Sheremetov and A.V. Smirnov
Component integration framework for manufacturing systems re-engineering:
agent and object approach

77

E. Oliveira, K. Fischer and O. Stepankova
Multi-agent systems: which research for which applications

91

Calendar 107

K.P. Jankowski and H.A. ElMaraghy
Robust hybrid position/force control of redundant robots

111

T. Kämpke
Functional arbitration for multipurpose senso-motory systems

129

<i>P. Veelaert and H. Peremans</i> Flexibility maps: A formalisation of navigation behaviours	151
<i>J.H. Reif and H. Wang</i> Social potential fields: A distributed behavioral control for autonomous robots	171
Calendar	195
<i>J. Huang, T. Supaongprapa, I. Terakura, F. Wang, N. Ohnishi and N. Sugie</i> A model-based sound localization system and its application to robot navigation	199
<i>C. Xiong, Y. Li, Y. Xiong, H. Ding and Q. Huang</i> Grasp capability analysis of multifingered robot hands	211
<i>R.R. Murphy, K. Hughes, A. Marzilli and E. Noll</i> Integrating explicit path planning with reactive control of mobile robots using Trulla	225
Calendar	247
Author Index to Volume 27	251
Subject Index to Volume 27	253
Contents Volume 27	255

